

## MATERIAL SAFETY DATA SHEET Immobilized rProtein A (IPA-400HC) Revision 1 (Effective 01/22/2010)

---

### SECTION 1 – PRODUCT IDENTIFICATION

Supplier: RepliGen Corporation  
41 Seyon Street, Building #1, Suite 100  
Waltham, MA 02453  
Phone: (781) 250-0111; Fax: (781) 250-0115

Product Name: Immobilized rProteinA (IPA-400HC)  
Synonym(s): IPA-400HC  
Catalog No(s): 10-2500

---

### SECTION 2 – COMPOSITION / INFORMATION ON INGREDIENTS

Product consists of recombinant Protein A immobilized on cross-linked agarose, prepared as a 50% slurry containing 0.01% thimerosal. Recombinant Protein A is derived from genetically modified *E. coli*.

Substance Name	CAS #	RTECS Number	% by weight	OSHA exposure limit
Thimerosal	54-64-8	OV8400000	0.01%	PEL: 8H TWA 0.01mg/ m <sup>3</sup>
Cross Linked Agarose	9012-36-6	-	50%	None known

---

### SECTION 3 – HAZARDS IDENTIFICATION

#### EMERGENCY OVERVIEW

Poison. Harmful by inhalation and ingestion.  
May be harmful through skin contact.

HMIS/NFPA Ratings: Health Hazard: **2** Temporary or minor injury may occur  
Fire: **0** Will not burn  
Instability: **0** Normally stable. Not reactive with water

EU Risk phrases R22: Harmful if swallowed.

Safety Statements: Keep away from food, drink, and animal feeding stuffs. After contact with skin, wash immediately with plenty of water. Wear suitable protective clothing. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

---

### SECTION 4 – FIRST AID MEASURES

In case of Ingestion Wash out mouth with water, provided person is conscious.  
Consult a physician.

In case of skin contact Flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. Consult a physician.

In case of eye contact Immediately flush eyes with plenty of water for at least 15 minutes. Assure adequate flushing by separating eyelids with fingers.  
Consult a physician.

In case of inhalation Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Consult a physician.

---

**Immobilized Protein A (IPA-400HC)**

---

**SECTION 5 – FIRE FIGHTING MEASURES**

Suitable media Dry chemical, CO<sub>2</sub>, water spray or foam  
Unusual Hazards Containers may leak if heated. Move containers away from heat or fire (if this can be done without risk)  
Special equipment Wear self contained breathing apparatus for fire fighting if necessary

---

**SECTION 6 – ACCIDENTAL RELEASE MEASURES**

In case of leak or spill: Evacuate area. Allow only suitably trained personnel to proceed with clean up. Provide adequate ventilation. Put on appropriate PPE.  
Personal protection (PPE): Wear safety glasses, lab coat, rubber boots and safety gloves.  
Methods for cleaning up: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform relevant authorities if the product has caused any environmental pollution.  
Stop leak, if possible without risk. Mop up, or absorb with an inert dry material and place in an appropriate waste disposal container. Do not dispose of in trash or in drains. **Dispose of via a licensed waste disposal contractor.**

---

**SECTION 7 – HANDLING AND STORAGE**

Handling: Wear personal protective equipment (minimum of a lab coat, gloves, and safety glasses). Use in a well ventilated area. Avoid generating splashes or aerosols.  
Do not get in eyes, on skin or on clothing.  
Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed.  
Avoid prolonged or repeated exposure.  
Storage: Store tightly closed in original container at 2-8 °C for optimum shelf life  
Special precautions: Keep tightly closed

---

**SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION**

Personal protective equipment: Should be selected based on the task being performed and the risk involved.  
Recommended: Wear gloves, laboratory coat and safety glasses when handling.  
Ensure Safety shower and eye bath are available and operational.  
Wash contaminated clothing before re-use. Wash skin thoroughly after handling.

Exposure limits

RTECS, Thimerosal:	Source	Type	Value	Remarks
	ACGIH	TWA	0.1 mg(Hg)/m <sup>3</sup>	Skin
	MSHA Std-Air	TWA	0.05 mg(Hg)/ m <sup>3</sup>	
	OSHA	PEL	8H TWA 0.01 mg(Hg)/ m <sup>3</sup>	
	NIOSH	Ceiling	0.1mg/ m <sup>3</sup>	(SK)

---

**SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES**

Appearance: Colorless liquid containing white suspended solids (50% slurry)  
Physical state: Liquid.  
Color: White solid/colorless liquid  
Form: 50% Suspension.  
Boiling point: 100 °C

---

**Immobilized Protein A (IPA-400HC)**

---

**SECTION 10 – STABILITY AND REACTIVITY**

Stability: Stable under normal use and storage.  
Hazardous polymerization: Will not occur  
Materials to avoid: No information

---

**SECTION 11 – TOXICOLOGICAL INFORMATION**

THIMEROSAL:  
Skin Contact: May cause skin irritation.  
Skin Absorption: May be toxic if absorbed through skin.  
Eye Contact: May cause eye irritation.  
Ingestion: May be fatal if swallowed.  
Sensitization: Material may be irritating to mucous membranes and upper respiratory tract.  
Sensitization: Prolonged or repeated exposure may cause allergic reactions in certain sensitive individuals.  
Target organs or systems: Nerves. Kidneys.  
Toxicity data (Thimerosal): Oral – rat - LD<sub>50</sub> 75 mg kg<sup>-1</sup>  
Subcutaneous – rat - LD<sub>50</sub> 98 mg kg<sup>-1</sup>  
Unreported – rat - LD<sub>50</sub> 40 mg kg<sup>-1</sup>  
IV – mouse - LD<sub>50</sub> 30 mg kg<sup>-1</sup>  
Oral – mouse - LD<sub>50</sub> 91 mg kg<sup>-1</sup>  
Intraperitoneal – mouse - LD<sub>50</sub> 54 mg kg<sup>-1</sup>  
Intra aural – child - LDLO 60 mg kg<sup>-1</sup>

---

**SECTION 12 – ECOLOGICAL INFORMATION**

- No Data
- 

**SECTION 13 – DISPOSAL CONSIDERATIONS**

- Do not dispose of this product in trash or down drains.
  - Contact a licensed professional waste disposal service to dispose of this material.
  - Dispose of in accordance with all applicable federal, state, and local environmental regulations.
- 

**SECTION 14 – TRANSPORT INFORMATION**

- Not regulated
- 

**SECTION 15 – REGULATORY INFORMATION**

EU Risk phrases R22: Harmful if swallowed.  
Safety Statements: Keep away from food, drink, and animal feeding stuffs. After contact with skin, wash immediately with plenty of water. Wear suitable protective clothing. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).  
This material and its container must be disposed of as hazardous waste. Avoid release to the environment.  
Refer to special instructions/safety data sheets.  
US Statements: Calif. Prop. 65 developmental hazard (Thimerosal)  
Target organ(s): Nerves. Kidneys. Possible sensitizer (Thimerosal)  
TSCA inventory item: Yes (Thimerosal)  
California prop – 65 California Prop - 65: This product is or contains chemical(s) known to the state of California to cause developmental toxicity (Thimerosal).

---

**SECTION 16 – OTHER INFORMATION**

The material published in this Material Safety Data Sheet has been compiled from our experience and data presented in various technical publications. It is the user's responsibility to determine the suitability of this information for the adoption of necessary safety precautions. Repligen makes no warranty or representation about the accuracy or completeness nor fitness for purpose of the information contained herein.